

MISCELLANEOUS NOTES ON AUSTRALIAN DIPTERA. III.

By G. H. HARDY, Queensland University, Brisbane.

[Read 31st July, 1935.]

Subfamily CHRYSOSOMATINAE.

In my catalogue of the Dolichopodidae, I drew attention to the need for improvement in the treatment of genus *Chrysosoma* and allies. I gave in the key the treatment usually adopted, but did not follow the system when arranging species under the genera. I was unaware of the paper by M. l'Abbé O. Parent redescribing two of Macquart's types, for the periodical containing that paper is not in any Australian library. A second paper by this author came to hand when the catalogue was going through the press and I was able to refer to new species described there. Much has been done since by Parent, and I append a list of the papers that contain references to Australian species as far as I know them. Half of these papers are not accessible in Australian libraries at the present time.

It is necessary here to point out that Parent uses Becker's system of classification, and hence he and I place species in quite different genera. He has found that the antennal structure is ambiguous in a minute percentage of specimens, whereas, dealing only with the Australian material, I find this ambiguity in a big percentage. I therefore divide the species into natural groups which are defined as far as possible.

Key to genera of the Chrysosomatinae.

1. Frons deeply excavated between eyes. Wings usually with second median vein strongly indicated (i.e., fourth vein forked), but may be missing CHRYEOSOMATINAE. 2
- Frons slightly or not excavated. Second median vein absent. Rarely do these characters occur, then if frons be excavated the radial veins all end at costa well before the apex of the wing, and if the second median vein is indicated there is also an appendix at the bend of the first median. In both cases the hind tibiae have many strong bristles which are about as long as the thickness of the tibia Other subfamilies.
2. Second median vein entirely eliminated and the first median gently curved 3
- Second median vein present usually and the first median branches away abruptly .. 4
3. Abdomen short, wings normal *Mesorhaga* Schin.
- Abdomen long, wings very narrow *Australiola* Par.
4. First median vein strongly sinuous at its basal half. Antennae with a swelling on basal segment forming a long process *Megistostylus* Bigot.
- First median vein only bowed or straight. Antennae without a process at basal segment 5
5. Male with the first radial vein very long, reaching costa at a point beyond that above the apex of the median cell. Male with hook-shaped cilia on costa.....
- *Parentia*, n. gen.
- Male with the first radial vein short and the costa not ciliated 6
6. First median vein strongly bent to a right angle. Median cross-vein strongly sinuous and often with a veinlet in centre or somewhat angulated there
- *Heteropsilopus* Big.
- Without these characters combined 7

7. Antennae with a long conical third segment and a terminal arista. A well developed sinuous median cross-vein and two pairs of scutellar bristles are usually present *Chrysosoma* Guér.
 Antennae normally short and with a dorsally placed arista but variable. It may reach the length of one and a half times or even twice as long as thick with a terminal arista. Other characters variable *Sciapus* Zell.

SCIAPUS complex.

It seems necessary to review the position of this complex as far as it affects the Australian fauna, the names and synonyms being as follows:

Sciapus Zell. 1842 (*Sciopus* of authors) with type *platypterus* Fab., Europe, includes *Leptops* Fall. 1823 (preoccupied), *Psilopus* Meig. 1824, *Psilopodinus* Bigot 1840, and *Psilopodius* Rond. 1861.

Chrysosoma Guérin 1832, and *Agnosoma* Guérin 1838, type *maculipennis* Guérin, from New Guinea, would seem to have as synonyms *Oariostylus* Bigot 1859, *Mesoblepharus* Bigot 1859, *Tylochaetus* Bigot 1888, *Spathipsilopus* Bigot 1890, *Oariopherus* Bigot 1890 and *Eudasypus* Bigot 1890.

Heteropsilopus Bigot 1858 can be isolated as a definite concept with type *grandis* Macq., and possibly *Plagiozopelina* Engel 1912 as a synonym.

The genus *Condylostylus* Bigot 1859, type *bituberculatus* Macq. from Brazil, forms a good concept that seems to have little in common with the Australian material and so Australian forms placed under it revert to *Sciapus*.

There are a number of other generic names proposed but founded on American forms that do not seem related intimately with those of Australia and so are ignored here. Nevertheless, I can detect six main groups in the Indian and Australian forms that seem to warrant names in accordance with the following key:

1. First radial vein reaching to and beyond a point level with apex of median cell on the male at least 2
 First radial vein short 3
2. Costa ciliated on male *(1st group) *Parentia*, n. gen.
 Costa not ciliated (2nd group) Type, *liber* Par., Fiji.
3. Costa ciliated, wings slender (3rd group) .. Type, *adhaerens* Beck., India.
 Costa not ciliated, or rarely so 4
4. Median cross-vein strongly sinuous and more or less angulated in centre, often with a veinlet there. First median vein bowed to a right angle
 (4th group) *Heteropsilopus* Big.
 Without these characters combined 5
5. Third segment of antennae long and strongly conical with an apical arista. Median cross-vein sinuous, at least usually so
 (5th group) *Chrysosoma* Guér.
 Third segment of antennae variable, usually short, arista apical or dorsal. Median cross-vein often sinuous but usually straight
 (6th group) *Sciapus* Zell.

The 5th and 6th groups are heterogeneous and I think *Mesoblepharus* Bigot, type *senegalensis* Macq. and synonym *Eudasypus* Big., might make a nucleus for another group, possibly incorporating the Australian *interruptum* Beck.

PARENTIA, n. gen.

Type, *Condylostylus separatus* Parent. Tasmania.

The arista is placed dorsally or apically on a short or rather short third antennal segment. Normally the scutellum has two pairs of bristles. The wings have the first radial vein on the male unusually long, reaching beyond the level of the apex of the median cell and in addition there is a fringe of rather long hook-shaped cilia along the costa (illustrated by Becker, 1922, fig. 203). The female has a short radial vein and is without the cilia. The forms are all dark

blue-green, except the typical form which seems to have colour dimorphism in this respect.

This genus is well represented in New Guinea and may occur beyond that area. It is not known from New Zealand and India, where another group with ciliated costa seems to take its place.

Key to males of species of Parentia.

1. Wings with a duplicated row of cilia on costa *duplociliata* Par.
Wings with a single row of cilia on costa 2
2. With wings dark and hairs abnormally abundant. Legs entirely dark
..... *nigropilosa* Macq.
Wings hyaline. Normally haired species 3
3. Legs entirely dark 4
Legs partly light coloured 5
4. Anterior femora with long black bristles on ventral surface *tricolor* Walk.
Anterior femora with only yellow or white hairs on ventral surface *dubia* Par.
5. Femora rather widely yellow-brown at apex *separata* Par.
Femora entirely dark, except perhaps at the tip *dispar* Macq.

PARENTIA DUPLOCILIATA (Parent).

Chrysosoma duplociliatum Parent, *Ann. Soc. Sci. Bruxelles*, (B) liii, 1933, 172.

Hab.—Northern Territory.

PARENTIA NIGROPILOSA (Macquart).

Psilopus nigropilosus Macquart, *Dipt. Exot.*, suppl. 2, 1847, 56.—*Sciapus nigropilosus* White, *Proc. Roy. Soc. Tasmania*, 1916, 251.—*Condylostylus nigropilosus* Hardy, *Aust. Zool.*, vi, 1930, 131; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 126.

Determination of this species is based on White's identification, but there is no assurance that White identified the species correctly. This list of references may cover a complex. Only the male is known to me.

Hab.—Tasmania.

PARENTIA TRICOLOR (Walker).

Psilopus tricolor Walker, *Ent. Mag.*, ii, 1835, 471.—*Psilopus gemmans* Walker, *List Dipt. B. Mus.*, lii, 1849, 644; Parent, *Ann. Mag. Nat. Hist.* (10), xiii, 1934, 34; and *Ann. Soc. Sci. Bruxelles*, (B) liii, 1933, 178.—*Condylostylus amoenus* Becker, *Cap. Zool.*, i, 1922, 219, fig. 203; Hardy, *Aust. Zool.*, vi, 1930, 131; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 126.

Walker's description fits well this common species, so I am giving preference to the name *tricolor*. Parent found that the type of *gemmans* was conspecific with Becker's species. Both sexes are before me.

Hab.—New South Wales and Victoria. Walker and Parent also record it from Western Australia.

PARENTIA DUBIA (Parent).

Chrysosoma dubium Parent, *Ann. Soc. Sci. Bruxelles*, (B) xlix, 1929, 201, figs. 50, 51; and lii, 1932, 109.—*Condylostylus dubius* Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 126.

A Queensland species before me agrees fairly well with the description of this one and runs to it in the key, but differs in having the lamellae very long and bifid. Both sexes are before me. I have not seen Parent's form.

Hab.—South Australia.

PARENTIA SEPARATA Parent.

Condylostylus sp., Hardy, *Aust. Zool.*, vi, 1930, 130 (in key).—*Condylostylus separatus* Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 127, fig. 19.

The only females I have been able to associate with this species have the femora and tibiae entirely yellow. These occur together and are quite common; I have not seen females with legs like those of the male or males with legs like those of the females. Also the female is green in colour.

Hab.—Tasmania: Generally distributed over the eastern half of the island from December to March. Victoria: Common in the Melbourne district.

PARENTIA DISPAR Macquart.

Psilopus dispar Macquart, *Dipt. Exot.*, suppl. 4, 1849, 125.—*Sciapus dispar* White, *Proc. Roy. Soc. Tasmania*. 1916, 251.—*Chrysosoma dispar* Parent, *Ann. Soc. Sci. Bruxelles* (Vol. Jub.), xlv, 1926, 18; and (B) lii, 1932, 109.

Hab.—New South Wales.

CHRYSOSOMA Guérin.

Chrysosoma Guérin, *Voy. Coq. Zool.*, 1831, Atlas, Tab. xx, 25, vii.

The species I place in this genus have the third segment of the antennae at least one and a half times longer than broad and the very long conical appearance with the arista placed terminally. The median cross-vein is sinuous on all described forms and probably all species with the straight median cross-vein are best relegated to *Sciapus* until its true associations can be worked out.

Doubtless *Chrysosoma* as here understood is a complex group; nevertheless there seems to be a general alliance between the majority of them.

Key to species of *Chrysosoma*, based mainly on males.

1. Arista with a spatulate apex *callosum* Parent.
Arista simple, at most slightly flattened at apex and then white in that area ... 2
2. Wings entirely fuscous or almost so. Long black hairs on frons .. *funerale* Parent.
Wings with fuscous markings. Costa ciliated *interruptum* Becker.
Wings hyaline 3
3. Intermediate legs on male with the fourth tarsal segment slightly enlarged and longer than the two prior segments united *caelicum* Parent.
Intermediate legs of male with tarsi not so formed 4
4. Anterior femora yellow, the others black *diversicolor* Parent.
All femora yellow or practically so. Hind tibiae with a black ring on male. Fourth segment of intermediate tarsi white on male *leucopogon* Wiedemann.

HETEROPSILOPUS Bigot.

Bigot, *Ann. Soc. Ent. France*, (3) iii, 1859, pp. 215, 224.

Type, by original designation, *Psilopus grandis* Macq., Australia.

A natural group is formed by *cingulipes* (syn. *grandis*) and associated species distinguishable by characters given in the key to genera.

Key to species of *Heteropsilopus*.

1. Wings clear. Arista subapical on a very short third segment. Two pairs of scutellar bristles *cingulipes* Walker.
Wings marked. Usually a dorsal arista and one pair of scutellar bristles 2
2. Wings lightly shaded along veins *jacquelinei* Parent.
Wings with spots limited to cross-veins and any shading elsewhere exceedingly faint *brevicornis* Macq.
Wings with well marked fascia 3
3. Apical segments of intermediate tarsi peculiarly formed on male. With conspicuous bristles on tibiae *ingenuus* Erichson.
Segments of intermediate tarsi more normal but with a fringe of cilia. With rather inconspicuous bristles on tibiae *plumifer* Beck.

HETEROPSILOPUS CINGULIPES Walker.

Psilopus cingulipes Walker, *Ent. Mag.*, ii, 1835, 472; Parent, *Ann. Mag. Nat. Hist.*, (10) xiii, 1934, 9.—*Chrysosoma cingulipes* Hardy, *Aust. Zool.*, vi, 1930, 126.—*Psilopus sydneyensis* Macquart, *Dipt. Exot.*, suppl. 1, 1846, P. xi, f. 16.—*Psilopus*

sidneyensis Macquart, *ibid.*, suppl. 2, 1847, 56; White, *Proc. Roy. Soc. Tasmania*, 1916, 251.—*Psilopus grandis* Macquart, *ibid.*, suppl. 4, 1849, 126; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 231 (synonymy).—*Psilopus eximius* Walker, *Ins. Saund. Dipt.*, i, 1852, 209; Parent, *Ann. Mag. Nat. Hist.*, (10) xiii, 1934, 16.—*Psilopus angulosus* Bigot, *Ann. Soc. Ent. France*, (6) x, 1890, 285; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 216.—*Chrysosoma alatum* Becker, *Cap. Zool.*, i, (4), 1922, 188, fig. 159; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 109.—*Chrysosoma micans* Parent, *ibid.*, 1932, 109.—? *Chrysosoma metallicum* Parent, *ibid.*, 1932, 113.

Much of the above synonymy is recognized by Parent who added *sydneyensis* Macq. and *micans* Par. to the list. The new synonymy is *angulosus* Big. and *metallicum* Par. I have a specimen of the latter, but regard it as a variation and it will require a male before it can be established definitely as a distinct species; meanwhile it seems to me advisable to place the name as a possible synonym.

Hab.—Queensland to Victoria.

HETEROPSILOPUS BREVICORNIS Macquart.

Psilopus brevicornis Macq., *Dipt. Exot.*, suppl. 4, 1849, 124.—*Sciapus brevicornis* White, *Proc. Roy. Soc. Tasmania*, 1916, 249; Hardy, *Aust. Zool.*, vi, 1930, 126; Parent, *Ann. Soc. Sci. Bruxelles* (Vol. Jub.), 1926, 16; and (B) lii, 1932, 117.—? *Psilopus venustus* Walker, *Ins. Saund. Dipt.*, i, 1858, 209; Parent, *Ann. Mag. Nat. Hist.*, (10) xiii, 1934, 36.—*Psilopus chrysurgus* Schiner, *Novara Reise Dipt.*, 1863, 214.—*Chrysosoma chrysurgum* Becker, *Cap. Zool.*, i, (4), 1922, 172; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 109; Hardy, *Aust. Zool.*, vi, 1930, 126.—*Sciapus chalceus* White, *Proc. Roy. Soc. Tasmania*, 1916, 250.—*Chrysosoma volucre* Becker, *Cap. Zool.*, i, (4), 1922, 142, figs. 74-6; Hardy, *Aust. Zool.*, vi, 1930, 126.—*Sciopus bimaculatus* Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 117, figs. 7-9.

The above synonymy is new. Parent agrees with me, in a letter, that his form is the same as Becker's, but is not yet prepared to give assurance that these are identical with Macquart's type which is incomplete. Nevertheless, he writes that he can find nothing to disagree with this synonymy in the descriptions. The names given by Walker, Schiner, and White, according to the descriptions, would also fall to synonymy, and there can be no doubt in this respect concerning Schiner's description, whilst that of White applies evidently to a variation.

In describing *venustus*, Walker gives the characters of a male with wing marks, whereas Parent, redescribing from Walker's material, refers to a female without wing marks, missing the appendix to the median cross-vein, but apparently agreeing in other respects.

Hab.—New South Wales to Tasmania. Records would indicate that this species occurs widely over Australia.

HETEROPSILOPUS INGENUUS Erichson.

Psilopus ingenuus Erichson, *Arch. f. Nat.*, xiii, 1842, 273.—*Sciapus ingenuus* Hardy, *Aust. Zool.*, vi, 1930, 127.—*Sciapus trifasciatus* White, *Proc. Roy. Soc. Tasmania*, 1916, 248; *nec* Macquart, 1849.—*Sciopus gloriosus* Parent, *Ann. Soc. Sci. Bruxelles*, lii, 1932, 119.

The above synonymy is amended from that of my catalogue, with Parent's name added as a new synonym.

Hab.—Tasmania (abundant) and Victoria. The species is plentiful in the Melbourne district, and there are females before me from Adelaide, South

Australia, and from the extreme north (Tooloom) of New South Wales, and these apparently are the same species.

HETEROSILOPUS TRIFASCIATUS Macquart.

Psilopus trifasciatus Macquart, *Dipt. Exot.*, suppl. 4, 1849, 126.—*Chrysosoma trifasciatum* Becker, *Cap. Zool.*, i, (4), 1922, 176; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 109.—*Sciopus trifasciatus* Parent, *Bull. Mus. Hist. Nat.*, (2) iv, 1932, 879; and *Ann. Soc. Sci. Bruxelles*, (B) liii, 1933, 179.

By comparison of the figures with specimens of *ingenuus*, I conclude that Parent has been misled in regarding *trifasciatus* Macq. as distinct from *ingenuus*. It seems probable that his figure, made from one of Macquart's specimens, is the result of faulty interpretation due to the specimen being in poor condition and not to differences in actual structure. This matter needs elucidating, but in the meanwhile the above references are kept separate.

HETEROSILOPUS PLUMIFER Becker.

Sciapus plumifer Becker, *Cap. Zool.*, i, (4), 1922, 206, figs. 183-4; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 122.

From near Becker's type locality comes a form that is to be distinguished from *ingenuus* Er. by structures, some of which are mentioned in Becker's description, and this form doubtless will prove conspecific with *plumifer*. The anterior tarsi are much longer than those on Erichson's species, being one and a half times longer than the anterior tibiae. This occurs on both sexes, and the male has the posterior tarsi similarly much longer. Also the tibiae are relatively bristleless in appearance, the bristles being small and yellow instead of well developed and black. In addition the male has the intermediate tarsi ciliated for their complete length and none of the segments are otherwise ornamented.

Hab.—New South Wales: Blue Mts.

SCIAPUS Zeller.

Zeller, *Isis*, xi, 1842, 831.

Other than those with wing markings, there are very few species below that lend themselves to ready recognition, but I have made an attempt to give a key that will aid in the determination of species. Many forms are known only from the female, and the species I have been able to identify are marked with an asterisk (*).

Key to species of Sciapus.

- | | |
|--|----------------------------------|
| 1. Wings with distinct markings. Median cross-vein straight | 2 |
| Wings without markings, clear or more or less suffused with grey | 5 |
| 2. Two bands joined at the base along costa | 3 |
| Not so marked | 4 |
| 3. Third radial vein distinctly though slightly sinuous. Hypopygium long, with laterally directed and rounded lamellae | * <i>connexus</i> Walk. |
| Third radial vein not sinuous. Hypopygium short and lamellae apically directed and pointed | <i>proximus</i> Par. |
| 4. Wings with two fascia across wings, usually complete and basal one not quite reaching costa. Lamellae not exerted beyond apex of hypopygium | * <i>discretifasciatus</i> Macq. |
| Wings with interrupted bands, making four spots, two of which touch costa. Lamellae long, exerted well beyond apex of hypopygium | <i>quadrinaculatus</i> Par. |
| 5. Median cross-vein sinuous | 6 |
| Median cross-vein straight or practically so | 8 |
| 6. All coxae black | 7 |
| Anterior coxae yellow | <i>difficilis</i> Par. |
| 7. Squama black | <i>imparile</i> Par. |
| Squama yellow. Male with a fringe of cilia on intermediate tarsi | <i>nobile</i> Par. |

8. Legs entirely black. Base of fifth radial vein recurrent **australensis* Schin.
Legs otherwise coloured. Radial vein not recurrent at base 9
9. Femora black or metallic-green, but yellow at apex **nigrofasciatus* Macq.
Femora entirely yellow 10
10. Hypopygium with elongated processes on lamellae 11
Hypopygium presumably without such processes 12
11. With two pairs of such processes *anomalicornis* Beck.
With three pairs of such processes **triscutatus* Hardy.
12. Third radial vein strongly bent downwards towards the first median vein and away
from the second radial. First median vein branches remote from the median
cross-vein by about one and a half times the length of the latter
..... *graciliventris* Par.
Wings normal 13
13. Antennae entirely black 14
Antennae yellow 16
14. Knees black *sublectus* Walk.
At most only knees of posterior legs black 15
15. Face parallel-sided *chetiscutatus* Par.
Eyes converging on face *nigrociliatus* Par.
16. Hypopygium with four long sinuous apical bristles on each lamella .. **sordidus* Par.
Hypopygium presumably not so formed 17
17. First median vein bent, with a low circular arch, practically a quadrant
..... *zonatus* Par.
First median vein bent to a broad rectangular arch **mollis* Par.

SCIAPUS NIGROFASCIATUS Macquart.

Psilopus nigrofasciatus Macquart, *Dipt. Exot.*, suppl. 4, 1849, 126.—*Condylostylus nigrofasciatus* Parent, *Bull. Mus. Nat. Hist. Paris*, (2), iv, 1932, 876.—*Psilopus viduus* Schiner, *Novara Reise Dipt.*, 1868, 216.—*Condylostylus viduus* Becker, *Cap. Zool.*, i, (4), 1922, 220; Hardy, *Aust. Zool.*, vi, 1930, 131; Parent, *Ann. Soc. Sci. Bruxelles*, lii, 1932, 127.—*Chrysosoma regale* Parent, *ibid.*, lii, 1932, 111.

Schiner's name is placed here as a new synonym. Both sexes are before me and the male agrees with the description of *regale* which was placed by Parent as a synonym of *nigrofasciatus*, after seeing the type.

Hab.—New South Wales.

SCIAPUS SUBLECTUS Walker.

Psilopus sublectus Walker, *Ins. Saund. Dipt.*, i, 1852, 211.—*Condylostylus sublectus* Parent, *Ann. Mag. Nat. Hist.*, (10), xiii, 1934, 31.

The identity of this species is unknown, and for its probable position in the key I depend entirely upon Walker's description.

Hab.—Tasmania.

SCIAPUS SORDIDUS Parent.

Sciopus sordidus Parent, *Mitt. Zool. Mus. Hamburg*, xliii, 1928, 193; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 123; Hardy, *Aust. Zool.*, vi, 1930, 132.—*Sciapus anomalipennis* Hardy, *ibid.*, vi, 1930, 128, figs. 1, 2; Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 117.

A male from Victoria agrees with *S. anomalipennis* Hardy, having identical characters except that the hypopygium is apparently larger and reaches the apex of the fourth abdominal segment, whereas on Queensland specimens it reaches to between the apex and middle of the fifth segment. Parent, who has only seen the female of his form and both sexes of mine, is in agreement with me, regarding them as conspecific.

Hab.—Queensland to Victoria. A male from Carrum, in the latter State, is in the collection of Mr. F. E. Wilson.

HYDROPHILORINAE.

Already five genera recognized as occurring in Australia are listed under this subfamily, namely: *Hydrophorus* Fallen, *Paralipatus* Bezzi, *Liparomyia* White, *Scorpiurus* Parent, and *Paranthinophilus* Parent. To these must be added *Thinophilus* Wahlbg., recorded here for the first time. The genus was discovered by Mr. L. Wassell and myself when making an unsuccessful attempt to secure *Paralipatus*, only two specimens of which are hitherto known, both taken by Mr. Wassell at a light when on camping trips with a motor-boat, and both specimens were sent to the late Dr. E. W. Ferguson.

HYDROPHORUS PRAECOX Lehm.

Parent, *Ann. Soc. Sci. Bruxelles*, (B) lii, 1932, 71.

Records of this species are given by Parent from Canberra and New South Wales. Specimens from Sydney and Hobart are before me and were mentioned (erroneously as two species) in my catalogue without specific determination. The species conforms well with Lundbeck's description (*Diptera Danica*, iv, 1912, p. 346).

THINOPHILUS WASSELLI, n. sp.

♂. The whole body is covered with a blue-green iridescence with purple tinges more or less obscured by a pulverulent olive-yellow. The antennae have the two basal segments yellow, the third black or mainly so, and the palpi also yellow. One pair each of vertical, ocellar and postvertical bristles all black, and one row of white postoculars that gives place to black towards the vertex and where extra bristles tend to form two rows, the second row numbering up to three bristles or may be absent. Some yellow and white hairs form a small scanty beard.

Each side of the prothorax are four short black bristles placed in a row. The mesonotum is without hairs, except for a small group of short stiff ones that run into eight dorsocentral bristles, the last two only being strongly developed. Outside these there is a line of four bristly hairs reaching the transverse suture, beyond which, in the same line, two supra-alar bristles occur. One each of humeral, posthumeral, notopleural and postalar bristles stand isolated except for two bristly hairs on the humeral tubercle. Two pairs of bristles occur on the scutellum. Some scanty long hairs occur on the propleura anterior in position to the spiracle, otherwise the pleura is bare. The abdomen contains six normal large segments uniformly covered with black stiff hairs, followed by a complex of much reduced segments and the hypopygium which is mainly retracted into a groove on the venter and reflexed, but showing a Y-shape induced by two diverging slender parts reaching the fourth segment.

The anterior coxae are yellow, with long black hairs placed anteriorly, and covered with a pulverulent white. The remainder of the anterior legs are similarly yellow except the apical tarsi, which are stained with black, the whole being covered with short scanty black hairs and only four bristles occur all on the anterior side of the tibiae. The intermediate and posterior coxae are yellow with a pulverulent grey that makes them unicolorous with the pleura, the remainder being coloured as the anterior legs, but the bristles of the tibiae are more plentiful and more generally distributed. The posterior coxae have a lateral bristle. The venation is typical.

The female is similar, but only five abdominal segments are to be detected and on the anterior coxae only short black hairs occur.

Hab.—Queensland: Southport, December, 1932, and January, 1933; 7 males and 12 females, occurring plentifully on the uncovered tidal mud around Mangrove swamps.

Note.—In Parent's key, this species runs to *Parathinophilus*, but may be separated by the absence of acrostichal bristles and other characters.

References.

- HARDY, G. H.—*Australian Zoologist*, vi, 1930, pp. 124-134. (Contains full references to literature except those of Parent's papers.)
PARENT, O.—*Ann. Soc. Sci. Bruxelles*, (B) xlvi, 1926, pp. 205-229; xlix, 1929, pp. 169-246; lii, 1932, pp. 105-176, 215-231; liii, 1933, pp. 170-187.
———, *Mitt. Zool. Mus. Hamburg*, xliii, 1928, pp. 155-198.
———, *Bull. Mus. Hist. Nat. Paris*, (2), iv, 1932, 872-881.
———, *Stett. Ent. Zeit.*, xciii, 1932, pp. 220-241.
———, *Ann. Mag. Nat. Hist.*, (10), xliii, 1934, pp. 1-38.
-